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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,046	04/27/2000	David C. Greenspan	028870-224	2871

7590 03/21/2002

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EXAMINER

PAK, JOHN D

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 03/21/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/560,046

Applicant(s)
Greenspan et al.

Examiner
Pak, J.

Art Unit
1616



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 18, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above, claim(s) 13, 14, and 38-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15-37, 48, and 49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 20) ☐ Other:

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Claims 1-49 are pending in this application.

Applicant's election with traverse of the invention of Group I, claims 1-12, 15-37¹ and 48-49 in Paper No. 10 is acknowledged. The traversal is on the ground(s) that the inventions are so closely related that a proper search of any would, by necessity, require a proper search of the others. Applicant also makes a public policy argument in limiting the number of patents that may issue from one application. This is not found persuasive because the propriety of a restriction requirement is based on a two-part test: distinctness or independence and undue burden.

Applicant does not appear to argue that the inventions are not distinct. Rather, applicant argues that the amount of additional burden placed on the Examiner in having to search and examine more than one inventive groups is not undue. The Examiner cannot agree. Full rationale for the Examiner's position with respect to undue burden was set forth in Paper No. 9, paragraph bridging pages 3 and 4. Separate searches and burden rising to the level of undue burden are necessitated due to the divergence of the subject matter and search fields. Would applicant accept wound treatments as equivalents to skin grafts? Would applicant accept aqueous extract of a substance as equivalents to the substance per se? These are the types of separate searching and separate reviews of the prior art that are necessitated if more than one invention had to be searched and examined. Applicant does not specifically address the Examiner's reasons, and

¹ Claim 23 was inadvertently left out of this group in the last Office Action. Claim 23 is included herein.

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generalizes the Examiner's conclusion as incorrect. The Examiner maintains his position of record.

The requirement is still deemed proper and is therefore made FINAL. Accordingly, claims 1-12, 15-37 and 48-49 will presently be examined to the extent that they read on the elected single disclosed composition of bioactive glass as set forth in Paper No. 10, page 2.

Claims 13-14 and 38-47 are withdrawn from further consideration as being directed to non-elected subject matter.

It is noted for the record that applicant claims the benefit of earlier filed applications. However, PTO records show that the subject matter of Serial No. 09/329,516 was not invented by applicant. Therefore, no benefit of earlier filing dates can be granted since the chain of pendency then does not extend to the provisional application.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, 15-37 are rejected under 35 U.S.C. 102(a) or (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 98/11853.

WO 98/11853 explicitly discloses particulates of bioactive glass and topical antibiotic for accelerated healing of wounds and burns, wherein the size of the bioactive glass particles can be less than 2 microns and various carriers are employed. See claims 1-9. Accelerated healing of wounds or burns can be obtained without the topical antibiotic (claim 16). Wound or burn dressings are disclosed (claims 12-13), made of various materials such as cotton or fiberglass made from bioactive glass. Wound treatment apparatus (e.g. multi chamber syringe, see claim 15) comprising two chambers and mixing means is disclosed (claims 14-15). In short, the claims are clearly anticipated, or at the very least rendered obvious within the meaning of section 103(a).

Claims 1 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of WO 98/11853 and Brosnahan, III (US 5,766,253).

Teachings of WO 98/11853 have been discussed above and the discussion there is incorporated herein to avoid repetition. Brosnahan discloses that surgical implant/bone attachment material may be formed from bioactive glass (see claims 4 and 8).

While the WO reference does not explicitly disclose various articles such as prosthetic implants, screws, plates, and tubes made from particulate bioactive glass, one having ordinary skill in the art would have been motivated to arrive at such articles from the bone attachment

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properties of bioactive glass (Brosnahan). Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been fairly suggested by the teachings of the cited references.

Claims 1, 6, 7, 9 and 48 are rejected under 35 U.S.C. 102(a) or (e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Boyan et al.

Boyan et al. explicitly disclose bioactive glass such as 45S, 55S, 65S particles with particle size 90-53 μm or 53-38 μm in carriers, which bioactive glass particles are used to make therapeutic implant materials (see column 3, lines 58-64; column 4, lines 31-54; claims 1-2, 8, 19, 26, 27. The bioactive glass particles known as 45S, 55S, 65S contain the components of instant claim 7. The claims are thereby anticipated or at the very least rendered obvious within the meaning of section 103(a).

Claims 1 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of WO 98/11853 and Medline Abstract 85076876.

Teachings of WO 98/11853 have been discussed above and the discussion there is incorporated herein to avoid repetition. Medline Abstract 85076876 discloses devices used for in vitro cell culture comprising bioactive glass.

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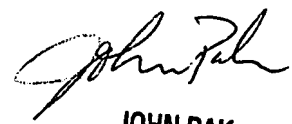
While the references do not explicitly disclose devices used for in vitro cell culture comprising particulate bioactive glass, bioactive glass of WO 98/11853 comes in that form. So do most other bioglass materials. One having ordinary skill in the art would thus have been motivated to utilize bioglass particles such as those disclosed in the WO reference to make devices for in vitro cell culture. Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been fairly suggested by the teachings of the cited reference.

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machines are (703) 308-4556 or (703) 305-3592.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Pak whose telephone number is (703) 308-4538. The Examiner can normally be reached on Monday through Thursday from 8:00 AM to 5:30 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. José Dees, can be reached on (703) 308-4628.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1235.


JOHN PAK
PRIMARY EXAMINER
GROUP 1200